Medical Care Collection Fund (MCCF) Electronic Data Interchange (EDI) Transaction Applications Suite (TAS) ePharmacy Build 13/14

Electronic Claims Management Engine BPS*1.0*26
Outpatient Pharmacy PSO*7.0*544
Integrated Billing IB*2.0*636
CMOP PSX*2.0*87

Deployment, Installation, Back-Out, and Rollback Guide

Version 1.0

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Revision History

Date	Version	Description	Author
April 2020	1.0	Initial Version	Mark Dawson

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

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1 Introduction

This document describes how to deploy and install the multi-build BPS PSO IB PSX BUNDLE 13.0 (which includes BPS*1.0*26, PSO*7.0*544, IB*2.0*636, PSX*2.0*87) and how to back-out the product and rollback to a previous version or data set.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the multi-build BPS PSO IB PSX BUNDLE 13.0 (which includes BPS*1.0*26, PSO*7.0*544, IB*2.0*636, PSX*2.0*87) will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

BPS*1.0*24 must be installed BEFORE BPS*1.0*26.
PSO*7.0*496 and PSO*7.0*528 must be installed BEFORE PSO*7.0*544.
IB*2.0*624 must be installed BEFORE IB*2.0*636.
PSX*2.0*83 must be installed BEFORE PSX*2.0*87.

1.3 Constraints

This patch is intended for a fully patched VistA system.

2 Roles and Responsibilities

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	VA OI&T, VA OI&T Health Product Support, and PMO (Leidos)	Deployment	Plan and schedule deployment (including orchestration with vendors)	Planning
2	Local VAMC and CPAC processes	Deployment	Determine and document the roles and responsibilities of those involved in the deployment.	Planning
3	Field Testing (Initial Operating Capability - IOC), Health Product Support Testing & VIP Release Agent Approval	Deployment	Test for operational readiness	Testing

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
4	Health product Support and Field Operations	Deployment	Execute deployment	Deployment
5	Individual Veterans Administration Medical Centers (VAMCs)	Installation	Plan and schedule installation	Deployment
6	VIP Release Agent	Installation	Ensure authority to operate and that certificate authority security documentation is in place	Deployment
7		Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes	N/A; only existing VistA system will be used
8	VA's eBusiness team	Installations	Coordinate training	Deployment
9	VIP release Agent, Health Product Support & the development team	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	Deployment
10	VA OI&T, VA OI&T Health Product Support, and MCCF EDI TAS Development Team (Halfaker)	Post Deployment	Hardware, Software and System Support	Warranty

3 Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

3.1 Timeline

The duration of deployment and installation is 30 days, as depicted in the master deployment schedule[1].

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[1] Project schedule (right click and select open hyperlink to access): MCCF TAS IMS Schedule.zip

3.2 Site Readiness Assessment

This section discusses the locations that will receive the deployment of the multi-build BPS PSO IB PSX BUNDLE 13.0 (which includes BPS*1.0*26, PSO*7.0*544, IB*2.0*636, PSX*2.0*87).

3.2.1 Deployment Topology (Targeted Architecture)

This multi-build BPS PSO IB PSX BUNDLE 13.0 (which includes BPS*1.0*26, PSO*7.0*544, IB*2.0*636, PSX*2.0*87) is to be nationally released to all VAMCs.

3.2.2 Site Information (Locations, Deployment Recipients)

The IOC sites are:
- Eastern Kansas (VA Heartland-West)
- Birmingham
- Lexington

Upon national release all VAMCs are expected to install this patch prior to or on the compliance date.

3.2.3 Site Preparation

The following table describes preparation required by the site prior to deployment.

Table 2: Site Preparation

Site/Other	Problem/Change Needed	Features to Adapt/Modify to New Product	Actions/Steps	Owner
N/A	N/A	N/A	N/A	N/A

3.3 Resources

3.3.1 Facility Specifics

The following table lists facility-specific features required for deployment.

Table 3: Facility-Specific Features

Site	Space/Room	Features Needed	Other
N/A	N/A	N/A	N/A

3.3.2 Hardware

The following table describes hardware specifications required at each site prior to deployment.

Table 4: Hardware Specifications

Required Hardware	Model	Version	Configuration	Manufacturer	Other
Existing VistA system	N/A	N/A	N/A	N/A	N/A

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these hardware specifications.

3.3.3 Software

The following table describes software specifications required at each site prior to deployment.

Table 5: Software Specifications

Required Software	Make	Version	Configuration	Manufacturer	Other
Fully patched Electronic Claims Management Engine package within VistA	N/A	1.0	N/A	N/A	N/A
Fully patched Outpatient Pharmacy package within VistA	N/A	7.0	N/A	N/A	N/A
Fully patched Integrated Billing package within VistA	N/A	2.0	N/A	N/A	N/A
Fully patched CMOP package within VistA	N/A	2.0	N/A	N/A	N/A

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

3.3.4 Communications

The sites that are participating in field testing (IOC) will use the "Patch Tracking" message in Outlook to communicate with the ePharmacy eBusiness team, the developers, and product support personnel.

3.3.4.1 Deployment/Installation/Back-Out Checklist

The Release Management team will deploy the multi-build BPS PSO IB PSX BUNDLE 13.0, which is tracked nationally for all VAMCs in the National Patch Module (NPM) in Forum. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed into the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch into their VistA production system. Therefore, this information does not need to be manually tracked in the chart below.

Table 6: Deployment/Installation/Back-Out Checklist

Activity	Day	Time	Individual who completed task
Deploy	N/A	N/A	N/A
Install	N/A	N/A	N/A

4 Installation

4.1 Pre-installation and System Requirements

Multi-build BPS PSO IB PSX BUNDLE 13.0 is installable on a fully patched M(UMPS) VistA system and operates on the top of the VistA environment provided by the VistA infrastructure packages. The latter provides utilities which communicate with the underlying operating system and hardware, thereby providing each VistA package independence from variations in hardware and operating system.

4.2 Platform Installation and Preparation

Refer to the BPS*1.0*26 documentation on the NPM in Forum for the detailed installation instructions. These instructions include any pre-installation steps if applicable.

4.3 Download and Extract Files

Refer to the BPS*1.0*26, PSO*7.0*544, IB*2.0*636, PSX*2.0*87 documentation on the NPM to find related documentation that can be downloaded. The patch description of each patch will be transmitted as a MailMan message from the NPM. These messages can also be pulled from the NPM. The patches themselves are bundled together into the multi-build BPS PSO IB PSX BUNDLE 13.0. The host file containing these patches must be downloaded separately. The file name is BPS_1_26_PSO_IB_PSX.KID and it can be found on the ANONYMOUS.SOFTWARE directory on any of the VistA SFTP servers (Hines, Salt Lake City).

4.4 Database Creation

Multi-build BPS PSO IB PSX BUNDLE 13.0 modifies the VistA database. All changes can be found on the NPM documentation for this patch.

4.5 Installation Scripts

No installation scripts are needed for multi-build BPS PSO IB PSX BUNDLE 13.0 installation.

4.6 Cron Scripts

No Cron scripts are needed for multi-build BPS PSO IB PSX BUNDLE 13.0 installation.

4.7 Access Requirements and Skills Needed for the Installation

Staff performing the installation of this multi-build will need access to FORUM's NPM to view all patch descriptions. Staff will also need access and ability to download the host file from one of the VA's SFTP servers. The software is to be installed by each site's or region's designated VA OI&T IT OPERATIONS SERVICE, Enterprise Service Lines, Vista Applications Division[2].

4.8 Installation Procedure

Detailed instructions for installing the multi-build BPS PSO IB PSX BUNDLE 13.0 (which includes BPS*1.0*26, PSO*7.0*544, IB*2.0*636, PSX*2.0*87) can be found on the patch description for BPS*1.0*26, which can be found on the NPM. Installing the multi-build BPS PSO IB PSX BUNDLE 13.0 will install all component patches (BPS*1.0*26, PSO*7.0*544, IB*2.0*636, PSX*2.0*87).

4.9 Installation Verification Procedure

Refer to the BPS*1.0*26 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

4.10   System Configuration

No system configuration changes are required for this patch.

4.11   Database Tuning

No reconfiguration of the VistA database, memory allocations or other resources is necessary.

5 Back-Out Procedure

Back-Out pertains to a return to the last known good operational state of the software and appropriate platform settings.

5.1 Back-Out Strategy

A decision to back out could be made during Site Mirror Testing, during Site Production Testing, or after National Release to the field (VAMCs). The best strategy decision is dependent on the stage during which the decision is made.

5.1.1   Mirror Testing or Site Production Testing

If a decision to back out is made during Mirror Testing or Site Production Testing, a new version of the patch can be used to restore the build components to their pre-patch condition.

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[2] "Enterprise service lines, VAD" for short. Formerly known as the IRM (Information Resources Management) or IT support.

5.1.2   After National Release but During the Designated Support Period

If a decision to back out is made after national release and within the designated support period, a new patch will be entered in the NPM in Forum and will go through all the necessary milestone reviews, etc. as a patch for a patch. This patch could be defined as an emergency patch, and it could be used to address specific issues pertaining to the original patch or it could be used to restore the build components to their original pre-patch condition.

5.1.3   After National Release and Warranty Period

After the support period, the VistA Maintenance Program will produce the new patch, either to correct the defective components or restore the build components to their original pre-patch condition.

5.2 Back-Out Considerations

Changes implemented with multi-build BPS PSO IB PSX BUNDLE 13.0 can be backed out in their entirety or on an enhancement-by-enhancement basis. Either could be accomplished via a new version of multi-build BPS PSO IB PSX BUNDLE 13.0 if before national release or a new multi-build if after national release.

5.2.1   Load Testing

N/A. The back-out process will be executed at normal rather than raised job priority and is expected to have no significant effect on total system performance. After the reversion, the performance demands on the system will be unchanged.

5.2.2   User Acceptance Testing

Below are the acceptance criteria for each story included in BPS PSO IB PSX BUNDLE 13.0.

US3397
- Comment displays on ECME User Screen for rejects that typically meet the transfer criteria, but are not original fills.
- The selected rejects for back-billed or resubmitted prescriptions that are refills or renewals are not displayed on the pharmacy worklist if the reject is automatically resolved.
- The selected rejects for back-billed or resubmitted prescriptions for original fills continue to display on the pharmacy worklist, if the reject should show on the worklist.
- OPECC can close back-billed prescription rejects that are not displayed on the pharmacy worklist. (Regression)
- OPECC cannot close back-billed prescriptions rejects for original fills that are displayed on the pharmacy worklist. (Regression)
- Comment displays on the ECME REJECT LOG (Activity Log).
- When a reject meets the criteria to automatically resolve, the following fields are populated in the prescription reject multiple: Status, Close Date/Time, Closed By, Close Reason.
- When a reject does not meet the criteria to automatically resolve, the reject is left open/unresolved in the prescription reject multiple. The reject is on the pharmacists' worklist if applicable. (Vet: 79, 88, 943, RRR; TRI/CVA: any reject)

- The automatically resolved rejects appear on the Pharmacy Productivity/Revenue Report and the 'Resolved By' is Postmaster.

US3398
- When a prescription has an unresolved reject on the pharmacist worklist and also has an existing bill in claims tracking, add comment " OPECC to Cancel Existing Bill in IB & Resubmit Claim" to the ECME User Screen after the pharmacist uses an action from the worklist that marks the reject as resolved.
- The comment displays appropriately on the ECME User Screen, with the claim lines.
- When the user selects the comment action from the ECME User Screen, the comment displays with the comment history.
- The comment is *NOT* added to the ECME User Screen when the pharmacist uses an action from the worklist that marks a reject as resolved and the prescription does *NOT* have an existing bill in claims tracking.
- When a prescription has an unresolved reject and also has an existing bill in claims tracking, update message "OPECC to Cancel Existing Bill in IB & Resubmit Claim" in the Reject Information Screen when the Pharmacist resolves the reject and tries to resubmit.
- The message is not displayed in the Reject Information Screen when the prescription does *NOT* have an existing bill in claims tracking.

US3935
- When a claim is resubmitted by the pharmacist and the claim is marked as non-billable in Claims Tracking, an additional message of "Reason Not Billable (RNB) must be removed from Claims Tracking prior to resubmitting" displays for the pharmacy user.
- When a claim is resubmitted by the pharmacist and the claim is not marked as non-billable in Claims Tracking, the additional message of "Reason Not Billable (RNB) must be removed from Claims Tracking prior to resubmitting" does not display for the pharmacy user.
- When a claim is resubmitted by the pharmacist and the claim is marked as non-billable in Claims Tracking, a comment of "OPECC to remove the RNB in CT & Resubmit Claim" displays for the user (OPECC) on the ECME User Screen and in comment history.
- When a claim is resubmitted by the pharmacist and the claim is not marked as non-billable in Claims Tracking, a comment of "OPECC to remove the RNB in CT & Resubmit Claim" does not display for the user (OPECC) on the ECME User Screen or in comment history.

US10032
- Claims with an Ingredient Cost of $0.00 should transmit to the PBM/Payer with an Ingredient Cost of $0.01.

US10179
- When the user selects the option "Pull Early from Suspense" a claim should not be sent if the previous claim was rejected and if all rejects have been resolved.
- When the user selects the action "PP" from the Medication Profile Screen a claim should not be sent if the previous claim was rejected and if all rejects have been resolved.
- The user can print the label and fill the prescription.
- CMOP functionality continues to work correctly (regression).
- Standard Print from Suspense continues to work correctly (regression).

US14316
- The Reject Codes have been updated in file BPS NCPDP REJECT CODES to reflect the codes that have been added and renamed.

- New/renamed Reject Codes can be:
    - selected in the testing tool.
    - received in a claim response and stored in VistA with the claim response.
    - displayed on the ECME User screen.
    - displayed on the Pharmacists' Worklist.
    - displayed on the Reject Notification Screen.
    - displayed on the Reject Information Screen.
    - displayed on the Rejected Claims Report and Closed Claims Report.
    - displayed on the LOG Print Claim Log (ECME User Screen and VER).

5.3 Back-Out Criteria

It may be decided to back out this patch if the project is canceled, the requested changes implemented by multi-build BPS PSO IB PSX BUNDLE 13.0 are no longer desired by VA OI&T and the ePharmacy eBusiness team, or the patch produces catastrophic problems.

5.4 Back-Out Risks

Since the ePharmacy software is tightly integrated with external systems, any attempt at a back-out should include close consultation with the external trading partners such as the Financial Services Center (FSC) and the Health Care Clearing House (HCCH) to determine risk.

5.5 Authority for Back-Out

Any back-out decision should be a joint decision of the Business Owner (or their representative) and the Program Manager with input from the Health Product Support (HPS) Application Coordinator, developers (both project and Tier 3 HPS), and if appropriate, external trading partners such as the VA Financial Service Center (FSC), Change Healthcare, or Transunion.

5.6 Back-Out Procedure

The back-out plan for VistA applications is complex and not a "one size fits all" solution. The general strategy for a VistA back-out is to repair the code with a follow-up patch. The development team recommends that sites log a ticket if it is a nationally released patch.

Back-Out Procedure prior to National Release
If it is prior to national release, the site will be already working directly with the development team daily and should contact that team. The development team members will have been identified in the Initial Operating Capability (IOC) Memorandum of Understanding (MOU). As discussed in section 5.2, it is likely that development team can quickly address via a new software version. If the site is unsure whom to contact, they may log a ticket or contact Health Product Support - Management Systems Team.

Multi-build BPS PSO IB PSX BUNDLE 13.0 contains the following build components:
- Routines
- Data Dictionary
- Entries in Files

While the VistA KIDS installation procedure allows the installer to back up the modified routines using the 'Backup a Transport Global' action, the back-out procedure for global, data dictionary and other VistA components is more complex and requires issuance of a follow-up patch to ensure all components are properly removed and/or restored. All software components (routines and other items) must be restored to their previous state at the same time and in conjunction with the restoration of the data.

Please contact the EPMO team for assistance since this installed patch contains components in addition to routines.

5.7 Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully implemented. This includes successful installation and testing that the back-out acts as expected, as defined together with the team the site contacted in section 5.5.

6 Rollback Procedure

Rollback pertains to data. The data changes in this patch are specific to the operational software and platform settings. These data changes are covered in the Back-out procedures detailed elsewhere in this document.

6.1 Rollback Considerations

Not applicable.

6.2 Rollback Criteria

Not applicable.

6.3 Rollback Risks

Not applicable.

6.4 Authority for Rollback

Not applicable.

6.5 Rollback Procedure

Not applicable.

6.6 Rollback Verification Procedure

Not applicable.

Template Revision History

Date	Version	Description	Author
March 2016	2.2	Changed the title from Installation, Back-Out, and Rollback Guide to Deployment and Installation Guide, with the understanding that Back-Out and Rollback belong with Installation.	VIP Team
February 2016	2.1	Changed title from Installation, Back-Out, and Rollback Plan to Installation, Back-Out, and Rollback Guide as recommended by OI&T Documentation Standards Committee	OI&T Documentation Standards Committee
December 2015	2.0	The OI&T Documentation Standards Committee merged the existing *"Installation, Back-Out, Rollback Plan"* template with the content requirements in the OI&T End-user Documentation Standards for a more comprehensive Installation Plan.	OI&T Documentation Standards Committee
February 2015	1.0	Initial Draft	Lifecycle and Release Management